

WHAT IS CLAIMED IS:

1. A tube pump for generating negative pressure in a tube, including:

a tube disposed along an actuate guide portion;

5 a pressing roller for squeezing said tube;

a rotary member to which said pressing roller is rotatably journaled; and

a supporting member to which said rotary member is rotatably journaled;

10 wherein said tube, said pressing roller, said rotary member and said supporting member are assembled to thereby form a pump unit, and are separable from said guide portion in the state of said pump unit.

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2. A tube pump according to Claim 1, wherein said supporting member is removably mounted on a guide member forming said guide portion, and at least one of said guide member and said supporting member
20 is formed of a material having slidability.

3. A tube pump according to Claim 1, wherein said pump unit has a pump gear for transmitting a rotational force to said rotary member.

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4. A tube pump according to Claim 1, wherein said pump unit has a fixing member for fixing said

tube.

5 5. A tube pump according to Claim 4, wherein
said fixing member is formed integrally with said
supporting member.

10 6. A tube pump according to Claim 1, wherein
said pump unit has a joint portion for connecting
said tube to an external route.

 7. A tube pump according to Claim 6, wherein
said joint portion is formed integrally with said
supporting member.

15 8. A tube pump according to Claim 1, wherein
said pressing roller is held to permit movement in
the radial direction thereof relative to said rotary
member, said pressing roller is radically outwardly
moved by the rotation of said rotary member in one
20 direction to thereby assume a tube pressing state,
and said pressing roller is radially inwardly moved
by the rotation of said rotary member in the other
direction to thereby release said tube pressing state.

25 9. A tube pump according to Claim 8, wherein on
a movement route of said pressing roller, there is a
biasing member for biasing, upon contact with said

pressing roller, said pressing roller in a direction opposite to a movement direction by said rotary member, and said biasing member is retractable during the passage of said pressing roller.

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10. A tube pump according to Claim 1, wherein the relative distances between said pressing roller and said guide portion are made common and a tube differing in inner diameter is mounted to thereby
10 make a tube pump differing in output characteristic makable.

11. A tube pump according to Claim 10, wherein said guide member of said tube pump differing in
15 output characteristic is formed by a common part.

12. A tube pump according to Claim 10, having a biasing member for biasing said pressing roller toward said tube, and wherein the biasing force of
20 said biasing member in said tube pump differing in output characteristic is made the same.

13. A tube pump according to Claim 10, wherein in said tube pump differing in output characteristic,
25 all of said rotary member and parts incorporated in said rotary member are made common.

14. A tube pump according to Claim 13, wherein said tube pump differing in output characteristic differs only in the inner diameter of said tube and is common in the other parts.

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15. A tube pump according to Claim 10, wherein said tube differing in inner diameter has the same thickness.

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16. A discharge recovering apparatus for recovering and maintaining the ink discharging performance of recording means for discharging ink, including:

a cap for covering the recording means;

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a tube connected to said cap, said tube being disposed along an arcuate guide portion;

a pressing roller for squeezing said tube;

a rotary member to which said pressing roller is rotatably journalled; and

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a supporting member to which said rotary member is rotatably journalled;

wherein said tube, said pressing roller, said rotary member and said supporting member are assembled to thereby form a pump unit, and are separable from said guide portion in the state of said pump unit.

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17. An ink jet recording apparatus for discharging ink from recording means to a recording material to thereby effect recording, including:

a cap for covering the recording means;

5 a tube connected to said cap, said tube being disposed along an arcuate guide portion;

a pressing roller for squeezing said tube,

a rotary member to which said pressing roller is rotatably journaled; and

10 a supporting member to which said rotary member is rotatably journaled;

wherein said tube, said pressing roller, said rotary member and said supporting member are assembled to thereby form a pump unit, and are
15 separable from said guide portion in the state of said pump unit.